

What is claimed is:

1. A flashlight comprising:
 - (a) means for retaining at least one battery;
 - (b) means for holding a light bulb;
 - (c) a conic reflector comprising a first central opening, a second central opening substantially opposite said first central opening, and an inner area defined by the space between said first central opening and said second central opening;
 - (d) a lens;
 - (e) means for selectively electrically coupling said means for holding a light bulb to said means for retaining at least one battery; and
 - (f) means for retaining said lens in a fixed position relative to said means for holding a light bulb, wherein said means is moveable to cause said reflector to move relative to said means for holding a light bulb.
2. A flashlight as claimed in claim 1, wherein said conic reflector is an elliptical reflector.
3. A flashlight as claimed in claim 1, wherein said conic reflector has an eccentricity of no less than about .80 and no more than about .99.
4. A flashlight as claimed in claim 1, wherein said conic reflector has an eccentricity of about .96.

5. A flashlight as claimed in claim 3, wherein said elliptical reflector has a vertex curvature of no less than about 2.0 and no more than about 5.2.

6. A flashlight as claimed in claim 4, wherein said elliptical reflector has a vertex curvature value of about 3.1.

7. A flashlight as claimed in claim 1, wherein said lens has an effective focal length of no less than about -2.5" and no more than about 0".

8. A flashlight as claimed in claim 1, wherein said lens is flat (planar).

9. A flashlight as claimed in claim 1, wherein said means for holding a light bulb further comprises means for holding a spare light bulb.

10. A flashlight as claimed in claim 1, wherein said means for holding a light bulb is retained by said means for retaining one or more batteries.

11. A flashlight as claimed in claim 1, wherein said means for retaining said lens in a fixed position relative to said means for holding a light bulb is removably connected to said means for retaining one or more batteries.

12. A flashlight as claimed in claim 1, wherein said means for retaining said lens in a fixed position relative to said means for holding a light bulb is moveable relative to said means for retaining one or more batteries.

13. A flashlight as claimed in claim 1, wherein said means for retaining one or more batteries further comprises a first opening for receiving one or more dry cell batteries; and means for selectively covering said first opening.

14. A flashlight as claimed in claim 13, wherein said means for selectively covering said first opening is an end cap.

15. A flashlight as claimed in claim 13, wherein said means for selectively covering said first opening further comprises means for preventing electric coupling of the positive pole of a battery when said battery is retained and said means for selectively covering said first opening is covering said first opening.

16. A flashlight as claimed in claim 1, wherein said means for retaining said lens in a fixed position relative to said means for holding a light bulb includes:

a head piece, having a first end and a second; and

a bezel rotatably connected to said first end of said head piece;

wherein said conic reflector is positioned within said bezel.

17. A flashlight as claimed in claim 16, wherein said conic reflector is moveable relative to said means for holding a light bulb by rotating said bezel relative to said head piece.

18. A flashlight as claimed in claim 16, wherein said means for retaining one or more batteries includes a chamber having a first opening for receiving one or more dry cell batteries and a second opening for retaining said means for selectively electrically coupling said means for holding a lamp bulb to said means for holding at least one battery;

wherein said second end of said head piece is rotatably connected to second end of said chamber.

19. a flashlight as claimed in claim 18, wherein said means for holding a lamp bulb is selectively electrically coupled to said means for holding at least one battery in accordance with the rotation of said head piece.

20. a flashlight comprising:

- (a) means for retaining two dry cell batteries;
- (b) a lamp;
- (c) means for electrically coupling said lamp and said batteries; and
- (d) a head assembly;

wherein said head assembly comprises an elliptical conical reflector and a lens selected from the group: planar lens or negative lens;

wherein said head assembly is movable such that the position of said reflector is movable relative to said lamp.

21. a flashlight as claimed in Claim 20, wherein said means for electrically coupling includes means for retaining a spare lamp.

22. a flashlight as claimed in Claim 20, wherein said means for electrically coupling further comprises first and second contact electrodes, wherein electrical coupling only occurs if said batteries are properly positioned within said means for retaining two batteries.

23. a flashlight as claimed in Claim 20, wherein said head assembly is moveable in a direction radially to said means for retaining two batteries to cause electrical coupling.

24. a flashlight as claimed in Claim 20, wherein said lamp comprises a bi-pin lamp.

25. a flashlight which is portable and hand held, and which is capable of operating with one or more batteries, said flashlight comprising:

(a) a chamber for retaining one or more batteries, wherein said chamber comprises a first opening for receiving one or more batteries; and a second opening substantially opposite said first opening;

(b) an end cap removably connected to said chamber for selectively covering and uncovering said first opening;

(c) a lamp bulb;

(d) means for holding said lamp bulb, said means retained by said chamber at said second opening;

(e) means for electrically coupling said means for holding a lamp bulb and one or more batteries in said chamber;

(f) a conic reflector comprising a first central opening, a second central opening substantially opposite said first central opening, and an inner area defined by the space between said first central opening and said second central opening;

(g) a lens;

(h) means for fixedly positioning said lens relative to said lamp, wherein said means is removably connected to said opening of said chamber and rotatable relative to said chamber cause said conic reflector to move relative said lamp.

26. a flashlight as claimed in Claim 25, wherein said means for holding said lamp bulb further comprises means for holding a spare lamp bulb.

27. a flashlight as claimed in Claim 25, wherein said conic reflector comprises an eccentricity of less than about .99 or more than about 1.01.

28. a flashlight as claimed in Claim 25, wherein said lens is selected from the group: convex lens, concave lens or planar lens.

29. a flashlight as claimed in Claim 25, wherein said means for electrically coupling said means for holding a lamp bulb and one or more batteries in said chamber further comprises means to prevent electrical coupling unless said batteries are properly aligned within said chamber.

30. a flashlight comprising:

a battery housing holding one or more batteries;

a lamp bulb holder capable of holding a lamp bulb; and

an electrical circuit extending from said battery housing to said lamp bulb holder for electrically coupling one or more batteries to a lamp bulb;

wherein said lamp bulb holder includes means for holding a spare lamp bulb.

31. a flashlight as claimed in Claim 26, wherein said lamp bulb holder further includes a phosphorescent coating or additive for illuminating light.

32. a flashlight comprising:

a battery housing holding one or more batteries;

a lamp bulb holder capable of holding a lamp bulb; and

an electrical circuit extending from said battery housing to said lamp bulb holder for electrically coupling one or more batteries to a lamp bulb;

wherein said electrical circuit comprises means to prevent electrical coupling unless said batteries are properly aligned within said chamber.

33. a flashlight comprising:

(a) means for retaining two dry cell batteries;

(b) a lamp;

(c) means for electrically coupling said lamp and said batteries; and

(d) a head assembly;

wherein said head assembly includes an elliptical reflector having a first central opening, a second central opening substantially opposite said first opening, and an inner area defined by the space between said first central opening and said second central opening;

wherein said head assembly further includes a lens selected from the group: planar lens or negative lens;

wherein said head assembly is movable such that the position of said lamp may be varied within said inner area of said reflector to focus and defocus light illuminated by said lamp.

34. a flashlight capable of projecting light illuminated by a light bulb which is electrically coupled to one or more batteries, said flashlight comprising:

- (a) means for retaining one or more batteries;
- (b) means for holding a light bulb;
- (c) a reflector comprising a first central opening, a second central opening substantially opposite said first central opening, an inner area defined by the space between said first central opening and said second central opening, and a focal point;
- (d) a lens;
- (e) means for electrically coupling said means for holding a lamp bulb to one or more batteries retained by said means for retaining one or more batteries;
- (f) means for retaining said lens in a fixed position relative to said means for holding a light bulb wherein said lamp is moveable through said first central opening and within said inner area of said reflector;

wherein said reflector reflects light rays illuminated by a light bulb positioned within said inner area of said reflector;

wherein light illuminated by a light bulb positioned within said inner area of said reflector does not contain a light void about the center of the reflected light rays when the light bulb is not positioned at said focal point of said reflector.

FOOTNOTES